

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

Applicant: **Pepperl + Fuchs (Aust) Pty Ltd**
131-149 Link Drive
Campbellfield
Melbourne VIC 3061
Australia

Equipment: K Series Isolated Barriers

Type of Explosion Protection: Intrinsic Safety 'i'

Explosion Protection Marking: [Ex ia Ma] I
-20°C ≤ Ta ≤ +50°C (For KFD2-SL2-Ex2* & KFD2-SL2-Ex2.B*)
-20°C ≤ Ta ≤ +60°C (For all other models)

*This certificate is granted subject to the conditions as set out in
Standards Australia/Standards New Zealand Miscellaneous Publication **MP87.1***

Signed for and on behalf of issuing body



Name & Position

Debbie Wouters – Acting Quality & Certification Manager

This certificate is not transferable and remains the property of the issuing body.

The status of this certificate can be confirmed through the database located at www.anzex.com.au

Certificate issued by:

TestSafe Australia
919 Londonderry Road, Londonderry NSW 2753 Australia

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: ANZEx 17.3006X	Current Issue: 0	Date of Issue: 21 February 2018
--	------------------	---------------------------------

Manufacturer : **Pepperl + Fuchs GmbH**
Lilienthalstrasse 200
68307 Mannheim
Germany

Additional Manufacturing Location(s): **Pepperl + Fuchs Asia Pte. Ltd.**
18 Ayer Rajah Crescent
139942
Singapore

PT. Pepperl + Fuchs Bintan
Jl. Asoka SD 56
Bintan Industrial Estate
Lobam, Bintan Island
Indonesia

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0:2011 Ed 6 Explosive atmospheres Part 0: Equipment—General requirements
IEC 60079-11:2011 Ed 6 Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"

This Certificate does not indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

The equipment listed has successfully met the examination and test requirements as recorded in:

Test Report No. & Issuing Body: HR/EXA/ExTR16.0003/00; Ex-Agencija
UK/BAS/04/0751, GB/BAS/ExTR10.0289/00, GB/BAS/ExTR15.0023/00,
GB/BAS/ExTR16.0291/00; Baseefa
UK/BAS/03/1011, GB/BAS/ExTR07.0143/00, GB/BAS/ExTR09.0170/00,
GB/BAS/ExTR14.0292/00, GB/BAS/ExTR16.0291/00; Baseefa
UK/BAS/04/0786, GB/BAS/ExTR06.0126/00, GB/BAS/ExTR09.0057/00,
GB/BAS/ExTR16.0090/00, GB/BAS/ExTR17.0061/00; Baseefa

Certificate of Conformity

Ex EQUIPMENT

Certificate No.:	ANZEx 17.3006X	Current Issue:	0	Date of Issue:	21 February 2018
------------------	-----------------------	----------------	---	----------------	------------------

GB/BAS/ExTR08.0264/00, GB/BAS/ExTR10.0184/00,
GB/BAS/ExTR15.0021/00; Baseefa

GB/BAS/ExTR06.0009/00, GB/BAS/ExTR09.0009/00,
GB/BAS/ExTR15.0021/00; Baseefa

GB/BAS/ExTR06.0100/00, GB/BAS/ExTR12.0196/00,
GB/BAS/ExTR15.0022/00; Baseefa

GB/BAS/ExTR10.0125/00, GB/BAS/ExTR12.0163/00,
GB/BAS/ExTR15.0020/00; Baseefa

DE/PTB/ExTR11.0049/00, DE/PTB/ExTR11.0049/01; PTB

DE/BVS/ExTR10.0036/00; DE/BVS/ExTR10.0036/01; DEKRA

DE/ZLM/ExTR14.0001/00; ZELM

DE/TUN/ExTR09.0008/00, DE/TUN/ExTR09.0008/01; TUV

DE/TUN/03PX19690, DE/TUN/ExTR06.0053/00 (06TUN553321),
DE/TUN/ExTR06.0053/01, DE/TUN/ExTR06.0053/02; TUV

DE/TUN/ExTR07.0013/00, DE/TUN/ExTR14.0039/00; TUV

DE/TUN/03PX06200, DE/TUN/ExTR06.0054/00 (06TUN553052),
DE/TUN/ExTR06.0054/01, DE/TUN/ExTR06.0054/02; TUV

36110, TestSafe

Quality Assessment Report No. & Issuing Body: DE/PTB/QAR06.0008/08 (17-26250-1) PTB

File Reference: 2017/012551

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Schedule

Equipment Description:

The K-System consists of wide range of isolated barriers suitable for mounting on 35 mm DIN mounting rail. These devices are associated apparatus and are used in C&I technology for the galvanic isolation of C&I signals, such as 20 mA and 10 V unit signals, and also for the adaptation and/or standardization of signals. Devices which have intrinsically safe control circuits are used to operate field devices within hazardous areas.

The maximum permissible ambient temperature is 60°C, except for models KFD2-SL2-Ex2* & KFD2-SL2-Ex2.B*, which operate at the maximum ambient temperature of 50°C.

The apparatus comprises of the following models:

MODEL	Comment
KFA5-DU-Ex1.D* KFA5-DWB-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFA6-DU-Ex1.D* KFA6-DWB-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFD0-CS-Ex*.50P KFD0-CS-Ex*.51P	(* = 1 for one channel or 2 for dual channel version)
KFD0-RO-EX2*	(* represents any number/letter not related to intrinsic safety)
KFD0-SD2-Ex*.1045 KFD0-SD2-Ex*.1065 KFD0-SD2-Ex1.10100 KFD0-SD2-Ex1.1180 KFD0-SD2-Ex*.1245	(* represents 1 for one channel or 2 for dual channel version)
KFD2-CD-Ex1.32.**	(** = 0 to 8 - Current Output Version: 0-20mA & 4-20mA) (** = 9 to 25 - Voltage Output Version 0-5V, 1-5V, 0-10V & 2-10V)
KFD2-CD2-Ex*	(* = 1 for one channel or 2 for dual channel version)
KFD2-CRG2-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFD2-DU-Ex1.D* KFD2-DWB-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFD2-PT2-Ex1* KFD2-PT2-Ex1*Y*	(* represents any number/letter not related to intrinsic safety)
KFD2-SCD2-Ex*.LK	(* = 1 for one channel or 2 for dual channel version)
KFD2-SL2-Ex1* KFD2-SL2-Ex1.B* KFD2-SL2-Ex2* KFD2-SL2-Ex2.B*	(* represents any number/letter not related to intrinsic safety)
KFD2-SL2-Ex1.LK KFD2-SL2-Ex1.LK.1045 KFD2-SL2-Ex1.LK.1270	

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

MODEL	Comment
KFD2-SR2-Ex1.W*	(* represents any number/letter not related to intrinsic safety)
KFD2-SR2-Ex1.W.LB*	
KFD2-SR2-Ex2.W*	
KFD2-SR2-Ex2.W.SM*	
KFD2-SR3-Ex2.2S*	(* represents any number/letter not related to intrinsic safety)
KFD2-UFC-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFD2-UFT-Ex2.D*	
KFD2-VR2-Ex1.50M	
KFD2-VR2-Ex1.500M	
KFD2-VR4-Ex1.26	
KFU8-CRG2-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFU8-DU-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFU8-DWB-Ex1.D*	
KFU8-UFC-Ex1.D*	(* represents any number/letter not related to intrinsic safety)
KFU8-UFT-Ex2.D*	

Electrical Ratings/Parameters

Non-hazardous Area terminals

Model	Terminals	Um	Un
KFA5-DU-Ex1.D*	23, 24 (Power supply)	126.5 V	115 V AC 2 A, 250 V AC or 2 A, 40 V DC
KFA5-DWB-Ex1.D*	10, 11, 12 and 16, 17, 18 (Contact circuits)	250 V	
	19, 20 (Transistor outputs)	40 V	
	13,14 (Control inputs)	40 V	
	PR3, PR5 (Interface RS485)	40 V	
	PR4 (Sum error)	40 V	
KFA6-DU-Ex1.D*	23, 24 (Power supply)	250 V	230 V AC 2 A, 250 V AC or 2 A, 40 V DC
KFA6-DWB-Ex1.D*	10, 11, 12 and 16, 17, 18 (Contact circuits)	250 V	
	19, 20 (Transistor outputs)	40 V	
	13,14 (Control inputs)	40 V	
	PR3, PR5 (Interface RS485)	40 V	
	PR4 (Sum error)	40 V	
KFD0-CS-Ex*.50P	7, 8, 9, 10, 11 & 12	250 V	35 V DC
KFD0-CS-Ex*.51P			
KFD0-RO-EX2*	7, 8 (Channel 1) or 8, 9 (Channel 2)	40 V DC	20...30 V DC
KFD0-SD2-Ex*.1045	7, 8 (Channel 1) or 8, 9 (Channel 2)	250 V	20...35 V DC
KFD0-SD2-Ex*.1065			
KFD0-SD2-Ex1.10100			
KFD0-SD2-Ex1.1180			
KFD0-SD2-Ex*.1245			
KFD2-CD-Ex1.32-**	7, 8, 9,10 & 11 and Power Rail Connector	250 V	35 V DC
KFD2-CD2-Ex*	7 to 9 (One channel) / 7 to 12 (Two channel), 14 & 15 and power rail terminals 1, 2 and 4	250 V	35 V DC

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

Model	Terminals	Um	Un
KFD2-CRG2-Ex1.D*	23, 24 or PR1, PR2 (Power supply) 10, 11, 12 and 16, 17, 18 (Relay outputs) 7, 8 (Current output) 19, 20 (Transistor output) 3.5 mm plug (RS232 interface)	40 V 250 V 40 V 40 V 40 V	20...30 V DC 2 A, 250 V AC 500 VA or 2 A, 40 V DC 80 W 0...20 mA, Rmax = 650Ω
KFD2-DU-Ex1.D* KFD2-DWB-Ex1.D*	23, 24 or PR1, PR2 (Power supply) 10, 11, 12 and 16, 17, 18 (Contact circuits) 19, 20 (Transistor outputs) 13,14 (Control inputs) PR3, PR5 (Interface RS485) PR4 (Sum error)	40 V 250 V 40 V 40 V 40 V 40 V	20...30 V DC 2 A, 250 V AC or 2 A, 40 V DC
KFD2-PT2-Ex1* KFD2-PT2-Ex1*Y*	11+,12- or Power Rail 7-, 8+ (Output)	250 V	20...35 V DC
KFD2-SCD2-Ex*.LK	7 to 9 (One channel) / 7 to 12 (Two channel), 14 & 15 and power rail terminals 1, 2 and 4	250 V	35 V DC
KFD2-SL2-Ex1* KFD2-SL2-Ex1.B* KFD2-SL2-Ex2* KFD2-SL2-Ex2.B*	14,15 or PR1, PR2 (Power supply) PR2 & PR4 (Error-output) 7, 8 or 8, 9 (Input circuits)	40 V 40 V 60 V	20...30 V 0...30 V
KFD2-SL2-Ex1.LK KFD2-SL2-Ex1.LK.1045 KFD2-SL2-Ex1.LK.1270	14+,15- or PR1, PR2 (Power supply) PR4 (Fault Signal) 7, 8 (Input) 10, 11, 12 (relay output)	40 V 40 V 60 V 250 V AC	20...30 V DC 0...30 V ≤ 250 V AC / 2 A 40 V DC / 2A
KFD2-SR2-Ex1.W* KFD2-SR2-Ex1.W.LB* KFD2-SR2-Ex2.W* KFD2-SR2-Ex2.W.SM*	14+,15- or PR1, PR2 (Power supply) PR4 (Fault Signal) 7, 8, 9 or 10,11,12 (Outputs)	125 V DC 250 V AC 40 V DC 250V AC	20...30 V DC ≤ 250 V AC / ≤ 2 A ≤ 126.5 V AC / ≤ 4 A ≤ 40 V DC / ≤ 2 A
KFD2-SR3-Ex2.2S*	14+,15- or PR1[+], PR2[-] (Power supply) PR4 (Fault Signal) 7, 8, 9 and 10, 11, 12 (Relay outputs)	250 V	19...30 V DC 30 V DC 48 V AC/40 V DC, I ≤ 1 A
KFD2-UFC-Ex1.D* KFD2-UFT-Ex2.D*	23, 24 or PR1, PR2 (Power supply) 10, 11, 12 and 16, 17, 18 (Relay outputs) 7, 8 (Current output) 19, 20 & 20,21 (Transistor outputs) 13,14 & 14, 15 (Control inputs) 3.5 mm plug (RS232 interface) PR3, PR5 (Interface RS485) PR4 (Sum error)	40 V 250 V 40 V 40 V 40 V 40 V 40 V 40 V	20...30 V DC 2 A, 250 V AC 500 VA or 2 A, 40 V DC 80 W 0...20 mA, Rmax = 650Ω

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

Model	Terminals	Um	Un
KFD2-VR2-Ex1.50M KFD2-VR2-Ex1.500M	1 & 14 wrt 2 & 15 and 7 wrt 8	250 V	20...30 V DC
KFD2-VR4-Ex1.26	7, 8, 11 & 12 and Power Rail Connector	250 V	20...30 V DC
KFU8-CRG2-Ex1.D*	23, 24 (Power supply) 10, 11, 12 and 16, 17, 18 (Relay outputs) 7, 8 (Current output) 19, 20 (Transistor output) 3.5 mm plug (RS232 interface)	125 V DC 250 V AC 250 V 40 V 40 V 40 V	20...90 V DC 48...250 V AC 2 A, 250 V AC 500 VA or 2 A, 40 V DC 80 W 0...20 mA, Rmax = 650Ω
KFU8-DU-Ex1.D* KFU8-DWB-Ex1.D*	23, 24 (Power supply) 10, 11, 12 and 16, 17, 18 (Contact circuits) 19, 20 (Transistor outputs) 13,14 (Control inputs) PR3, PR5 (Interface RS485) PR4 (Sum error)	250 V 250 V 40 V 40 V 40 V 40 V	20...90 V DC or 48...250 V AC 2 A, 250 V AC or 2 A, 40 V DC
KFU8-UFC-Ex1.D* KFU8-UFT-Ex2.D*	23, 24 (Power supply) 10, 11, 12 and 16, 17, 18 (Relay outputs) 7, 8 (Current output) 19, 20 & 20,21 (Transistor outputs) 13,14 & 14, 15 (Control inputs) 3.5 mm plug (RS232 interface) PR3, PR5 (Interface RS485) PR4 (Sum error)	250 V 250 V 40 V 40 V 40 V 40 V 40 V 40 V	20...90 V DC 48...250 V AC 2 A, 250 V AC 500 VA or 2 A, 40 V DC 80 W 0...20 mA, Rmax = 650Ω

Hazardous Area terminals

Output parameters:

Model	Terminals	Uo (V)	Io (mA)	Po (mW)	Co (µF)	Lo (mH)	Lo/Ro (µH/ Ω)
KFA5-DU-Ex1.D* KFA5-DWB-Ex1.D*	1, 3	10.1	13.5	34	79	1000	-
KFA6-DU-Ex1.D* KFA6-DWB-Ex1.D*	1, 3	10.1	13.5	34	79	1000	-
KFD0-CS-Ex*.50P KFD0-CS-Ex*.51P	1 & 2 (Channel 1) 4 & 5 (Channel 2)	25.2	93	585	2.4	51	797
KFD0-SD2-Ex*.1045	1 wrt 2 & 3 (Channel 1) 4 wrt 5 & 6 (Channel 2)	25.2	93	586	2.4	53.95	796
KFD0-SD2-Ex*.1065	1 wrt 2 & 3 (Channel 1) 4 wrt 5 & 6 (Channel 2)	17.22	220	947	5.9	9.64	492

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

Model	Terminals	U _o (V)	I _o (mA)	P _o (mW)	C _o (μF)	L _o (mH)	Lo/Ro (μH/ Ω)
KFD0-SD2-Ex1.10100	1 wrt 2 & 3 (Channel 1) 4 wrt 5 & 6 (Channel 2)	17	271	1152	6.32	6.35	405
KFD0-SD2-Ex1.1180	1 wrt 2 & 3 (Channel 1) 4 wrt 5 & 6 (Channel 2)	25.2	184	1159	2.4	13.78	402
KFD0-SD2-Ex*.1245	1 wrt 2 & 3 (Channel 1) 4 wrt 5 & 6 (Channel 2)	25.2	110	693	2.4	38.56	673
KFD2-CD-Ex1.32-** (where ** = 0 to 8)	1 & 2	25.2	93	586	2.4	26	779
KFD2-CD-Ex1.32-** (where ** = 9 to 25)	1 & 2	25.2	95	586	2.4	26	779
KFD2-CD2-Ex*	1 & 2 (Channel 1) 4 & 5 (Channel 2)	25.2	93	585	2.4	26	787
KFD2-CRG2-Ex1.D*	1, 2, 3	25.8	112	720	2.28	20	-
	1, 3	25.8	93	603	2.28	30	-
	2, 3	5	0.3	0.3	-	-	-
KFD2-DU-Ex1.D* KFD2-DWB-Ex1.D*	1, 3	10.1	13.5	34	79	1000	-
KFD2-PT2-Ex1*	1, 2, 3, 4 & 5	10.4	31.4	82	110	473.31	3000
KFD2-PT2-Ex1*Y*	1, 2, 3, 4 & 5	10.4	46	120	69	220.54	3000
KFD2-SCD2-Ex*.LK	1 & 2 (Channel 1) 4 & 5 (Channel 2)	25.2	93	585	2.4	26	787
KFD2-SL2-Ex1* KFD2-SL2-Ex1.B* KFD2-SL2-Ex2* KFD2-SL2-Ex2.B*	1, 2, 3 (Channel 1) 4, 5, 6 (Channel 2)	28	110	770	1.88	38.5	-
KFD2-SL2-Ex1.LK	1, 2, 3	28	110	770	1.88	38.57	-
KFD2-SL2-Ex1.LK.1045	1, 2, 3	26	93	607	2.25	53.96	-
KFD2-SL2-Ex1.LK.1270	1, 2, 3	22.1	248	1380	2.97	7.59	-
KFD2-SR2-Ex1.W* KFD2-SR2-Ex1.W.LB*	1, 2, 3 (Channel 1) 4, 5, 6 (Channel 2)	10.5	13	34	95	1000	-
KFD2-SR2-Ex2.W* KFD2-SR2-Ex2.W.SM*	1, 2, 3 and 4, 5, 6 (combined)	10.5	26	68	95	500	-
KFD2-SR3-Ex2.2S*	1+, 2+, 3- (Channel 1) 4+, 5+, 6- (Channel 2)	10.5	17.1	45	95	1000	10390
KFD2-UFC-Ex1.D* KFD2-UFT-Ex2.D*	1, 3 (Channel 1) 4, 6 (Channel 2)	10.1	13.5	34	79	1000	-
	1, 3 and 4, 6 (Parallel)	10.1	27	68	79	600	-
KFD2-VR2-Ex1.50M KFD2-VR2-Ex1.500M	4 wrt 5	5.5	2.4	3.3	1000	1000	425
KFD2-VR4-Ex1.26	1, 3, 5 wrt 4 and 2, 6 wrt 4	-25.2	90	570	2.4	54.95	785
	All hazardous area Terminals 1 to 6	-26.4	90	570	2.17	54.95	785

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: ANZEX 17.3006X	Current Issue: 0	Date of Issue: 21 February 2018
--	------------------	---------------------------------

Model	Terminals	U _o (V)	I _o (mA)	P _o (mW)	C _o (μF)	L _o (mH)	L _o /R _o (μH/ Ω)
KFU8-CRG2-Ex1.D*	1, 2, 3	25.8	112	720	2.28	20	-
	1, 3	25.8	93	603	2.28	30	-
	2, 3	5	0.3	0.3	-	-	-
KFU8-DU-Ex1.D* KFU8-DWB-Ex1.D*	1, 3	10.1	13.5	34	79	1000	-
KFU8-UFC-Ex1.D* KFU8-UFT-Ex2.D*	1, 3 (Channel 1) 4, 6 (Channel 2)	10.1	13.5	34	79	1000	-
	1, 3 and 4, 6 (Parallel)	10.1	27	68	79	600	-

The above parameters for capacitance and inductance apply when one of the two conditions below is met:

- The total L_i of the external circuit (excluding the cable) is < 1% of the L_o value or
- The total C_i of the external circuit (excluding the cable) is < 1% of the C_o value.

The above parameters for capacitance and inductance are reduced to 50% when both of the two conditions below are met:

- the total L_i of the external circuit (excluding the cable) > 1% of the L_o value and
- the total C_i of the external circuit (excluding the cable) > 1% of the C_o value.

Note: the reduced capacitance of the external circuit (including cable) shall not be greater than 1μF.

Input parameters:

Model	Terminals	U _i (V)	I _i (mA)	P _i (mW)	C _i (μF)	L _i (mH)
KFD0-RO-EX2*	1, 2, 3 (Channel 1) 4, 5, 6 (Channel 2)	60	2000	-	negligible	negligible
KFD2-CRG2-Ex1.D*	2, 3	30	115		negligible	negligible
KFU8-CRG2-Ex1.D*	2, 3	30	115		negligible	negligible

Specific Conditions of Use:

For Model KFD0-CS-Ex*.50P/51P:

1. The KFD0-CS-Ex*.50P/51P device must be installed and operated in a controlled environment with at least a reduced pollution degree 2 or better and with overvoltage category I/II.

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

History of Issues and Variations

Issue 0

Manufacturer's Documents associated with Issue 0:

Document Number	Pages / Sheets	Document Title	Revision	Date
266-0002TE-09	2	Instructions KFD2-***-Ex* (Various KF-devices)	-	06 Nov 2017
266-0002TE-10	1	Type Label KFD2-***-Ex* (Various KF-devices) (Marking Label)	-	06 Nov 2017
KFD0-CS-Ex*.50P/51P				
266-003BS-01C	1	Schematic	C	24 Apr 2013
266-003BS-02A	11	(Relevant) Components	A	04 Mar 2015
266-003BS-03C	1	Component overlay	C	24 Apr 2013
266-003BS-05C	8	PCB details (Layouts)	C	24 Apr 2013
266-003BS-01D	4	Schematic	D	27 Mar 2017
266-003BS-02D	4	Safety Relevant Components	D	08 Feb 2017
266-003BS-03D	2	Component Overlays	D	27 Mar 2017
16-0706IE-04D	14	Mechanical Parts	D	30 Mar 2016
266-003BS-05D	4	PCB details (Layouts)	D	27 Mar 2017
266-003BS-06D	4	Transformer details	D	14 Dec 2016
KFD2-CD-Ex1.32-**				
266-002BS	1	Summary	C	16 Dec 2015
266-002BS-01	2	Schematic	Original	01 Oct 2004
266-002BS-02	5	Components (BOM)	A	04 Nov 2015
266-002BS-03	1	Component Overlay	A	15 Sep 2010
266-002BS-05	1-8 of 11	PCB Layout	A	15 Sep 2010
266-002BS-05	11 of 11	Transformer PCB	A	15 Sep 2010
266-002BS-06	4	Transformer Details	A	12 Nov 2015
16-0706IE-04	14	Mechanical Parts	C	27 Mar 2014
266-0002TE-07	2	PCB Lacquering Details	Original	26 Oct 2017
KFD2-CD2-Ex* & KFD2-SCD2-Ex*.LK				
251-0416	3	Circuit Diagram	D	17 Sep 2002
255-1472	9	PCB Master	J	18 Sep 2002
257-0224	2	PCB Lacquering Details	C	04 Nov 2003
253-0239	2	Component Overlay (Ref.)	G	18 Sep 2002

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEX 17.3006X** Current Issue: 0 Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
252-1258	1	Parts List Planar transformer type 256-0127	B	16 Aug 2000
252-1289	1	Parts List Planar transformer type 256-0128	B	16 Aug 2000
252-1290	1	Parts List Planar transformer type 256-0129	B	16 Aug 2000
252-1291	1	Parts List Planar transformer type 256-0130	B	16 Aug 2000
252-1292	1	Parts List Planar transformer type 256-0131	B	16 Aug 2000
252-1293	1	Parts List Planar transformer type 256-0132	B	16 Aug 2000
252-1294	1	Parts List Planar transformer type 256-0133	B	16 Aug 2000
252-1295	1	Parts List Planar transformer type 256-0134	B	16 Aug 2000
256-0127	1	Assembly details for transformer - 256-0127	A	17 May 2000
256-0128	1	Assembly details for transformer - 256-0128	A	17 May 2000
256-0129	1	Assembly details for transformer - 256-0129	A	17 May 2000
256-0130	1	Assembly details for transformer - 256-0130	A	17 May 2000
256-0131	1	Assembly details for transformer - 256-0131	A	17 May 2000
256-0132	1	Assembly details for transformer - 256-0132	A	17 May 2000
256-0133	1	Assembly details for transformer - 256-0133	A	17 May 2000
256-0134	1	Assembly details for transformer - 256-0134	A	17 May 2000
255-1478	17	PCB Master for planar transformer 12 turns, 8 Layers	C	25 Feb 2002
254-0301	2	General assembly for planar transformers	C	29 Jun 2001
254-0303	1	Creepage distance details for planar transformer	A	23 May 2000
04-ADN2	2	Mounting Plate	G	16 Jan 2003
254-5003	1	Detail of sideplate holes for switches	Original	04 Oct 2002
251-5040	2	Circuit Diagram for KFD2-SCD2-Ex1.LK	Original	30 Sep 2002
257-5062	2	PCB lacquering details for KFD2-SCD2-Ex1.LK	Original	04 Nov 2003
253-5042	2	Component Overlay for KFD2-SCD2-Ex1.LK	Original	02 Oct 2002
251-5042	2	Circuit Diagram for KFD2-CD2-Ex1	Original	03 Oct 2002
257-5064	2	PCB lacquering details for KFD2-CD2-Ex1	Original	06 Nov 2003
253-5044	2	Component Overlay for KFD2-CD2-Ex1	Original	02 Oct 2002
251-5041	3	Circuit Diagram for KFD2-CD2-Ex2	Original	30 Sep 2002
257-5063	2	PCB lacquering details for KFD2-CD2-Ex2	Original	05 Nov 2003
253-5043	2	Component Overlay for KFD2-CD2-Ex2	Original	02 Oct 2002
266-036BS-05	31	Planar Transformer	Original	26 Feb 2007
266-010BS-04	15	Mechanical Parts	E	27 Mar 2014

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
266-036BS-02	5	Relevant Components	L	16 Dec 2015
KFD2-SR3-Ex2.2S*				
16-1224EX	1	Summary	-	28 Sep 2015
16-1224EX-00	9	Description, Calculations	-	28 Sep 2015
16-1224EX-01	2	Schematics Drawing	-	28 Sep 2015
16-1224EX-02	7	Relevant Components	-	28 Sep 2015
16-1224EX-03	2	Component Set-Up	-	28 Sep 2015
16-1224EX-04	2	Mechanical Parts	-	28 Sep 2015
16-1224EX-05	4	PCB Layouts, Multilayer	-	28 Sep 2015
16-1224EX-06	2	Transformer	-	28 Sep 2015
16-1224EX-13	2	Test Report	-	28 Sep 2015
KFD2-CRG2-Ex1.D* & KFU8-CRG2-Ex1.D*				
16-253PT-09	1	KF-housing (5 plug stripes)	A	29 Apr 1997
16-253PT-13	1	KF-housing	A	29 Apr 1997
16-253PT-14	1	KF-housing	A	29 Apr 1997
16-253PT-15	1	KF-housing	B	29 Apr 1997
16-253PT-26	1	KF-housing	0	07 Nov 1997
16-253PT-28	1	KF-housing	0	10 Nov 1997
16-253PT-29	1	KF-housing asym. (5 plug stripes)	0	12 Feb 1999
16-253PT-30	1	KF-housing asym. (5 plug stripes)	0	12 Feb 1999
16-554TV	1	Summary KF**-CRG2-Ex1**	-	04 Apr 2008
16-554TV-00	15	Description KF**-CRG*-Ex1.**	-	01 Apr 2008
16-554TV-01	8	Schematic KF**-CRG2-Ex1.*.*** CRG2 - Amplifier	-	02 Apr 2008
16-554TV-02	2	Relevant Components	-	02 Apr 2008
16-554TV-03	7	Set up (PCB Overlay)	-	03 Apr 2008
16-554TV-05	8	Layout	-	03 Apr 2008
16-554TV-07	3	Lacquering KF**-CRG2-Ex1**	-	04 Apr 2008
16-554TV B	1	Description Summary KF**-CRG2-Ex1.D	B	21 Oct 2013
16-554TV-00B	3	Description KF**-CRG2-Ex1.D	B	21 Oct 2013
16-0554TV-47	3	Checklist – General explosive gas atmospheres	-	11 Jul 2012
16-0554TV-47A	3	Checklist for explosive atmospheres	A	24 Apr 2013
16-0554TV-47B	3	Checklist – EN 60079-11:2012	B	21 Oct 2013

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
KFD2-UFC-Ex1.D*, KFD2-UFT-Ex2.D*, KFU8-UFC-Ex1.D*, KFU8-UFT-Ex2.D*				
16-532TV-00	25	Description	-	08 Sep 2006
16-532TV-01	13	Schematics UFC – Amplifier PCB	-	03 Jul 2006
16-532TV-02	2	Safety Relevant Components	-	05 Sep 2006
16-532TV-03	9	UFT Amplifier PCB SMD (PCB Layout)	-	30 Jun 2006
16-532TV-04	1 of 11	Mechanical Parts	-	19 Apr 2006
16-538TV-04	2 - 11	Mechanical Parts	-	19 Apr 2006
16-532TV-05	14	UFT/UFC Amplifier PCB (layout)	-	27 Jun 2006
16-532TV-06	5	Mains Transformer	-	09 May 2006
16-532TV-07	4	Assembling	-	30 Jun 2006
16-532TV-13	10	Test Reports (Transformer)	-	04 Apr 2006
16-532TV-00B	1	Description	B	08 Jul 2009
16-532TV-01B	8	Schematics UFT – Amplifier	B	30 Jul 2009
16-532TV-03B	4	Set up (PCB overlay Amplifier)	B	30 Jul 2009
16-532TV-05B	4	PCB Layout (Amplifier)	B	30 Jul 2009
16-532TV-00C	1	Description	C	20 Feb 2014
16-0532TV-47C	3	Checklist – General explosive gas atmospheres	C	11 Jul 2012
16-0532TV-47D	5	Checklist for explosive atmospheres	D	20 Feb 2014
KFD2-SL2-Ex1*, KFD2-SL2-Ex1.B*, KFD2-SL2-Ex2*, KFD2-SL2-Ex2.B*				
16-548FM-00	18	Description KFD2-SL2-Ex* and KFD2-SL2-Ex*.B	-	22 Feb 2007
16-548FM-01	10	Schematics KFD2-SL2-Ex2	-	22 Feb 2007
16-548TV-02	1	Relevant Components KFD2-SL2-Ex*.*	-	17 Apr 2007
16-548FM-03	5	Set up KFD2-SL2-Ex*.*	-	22 Feb 2007
16-548ZE-05	4	Layout KFD2-SL2-Ex*.*	-	15 Dec 2006
16-548FM-06	2	Transformer KFD2-SL2-Ex*.*	-	15 Jan 2007
16-548ZE-07	3	Lacquering KFD2-SL2-Ex*.*	-	24 Aug 2006
16-548ZE-13	5	Test Reports KFD2-SL2-Ex*.*	-	07 Nov 2006
16-0548TV-00B	2	Description KFD2-SL2-Ex*(.B)	B	22 Jan 2014
KFA*-DU-Ex1.D*, KFA*-DWB-Ex1.D*, KFD2-DU-Ex1.D*, KFD2-DWB-Ex1.D*, KFU8-DU-Ex1.D*, KFU8-DWB-Ex1.D*				
16-538TV-00	30	Description KF**-D**-Ex1.*.***	-	08 Sep 2006
16-538TV-01	13	Schematic KF**-D**-Ex1.*.***	-	03 Jul 2006
16-538TV-02	2	Safety Relevant Components KF**-D**-Ex1.*.***	-	05 Sep 2006

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
16-538TV-03	11	Set up KF**-D**-Ex1.*.*** (PCB Overlay)	-	30 Jun 2006
16-538TV-04	11	Mechanical parts KF**-D**-Ex1.*.***	-	04 Apr 2006
16-538TV-05	16	Layout KF**-D**-Ex1.*.***	-	27 Jun 2006
16-538TV-06	10	Mains Transformer KF**-D**-Ex1.*.***	-	09 May 2006
16-538TV-07	5	Assembling KF**-D**-Ex1.*.***	-	30 Jun 2006
16-538TV-13	17	Test Reports KF**-D**-Ex1.*.*** (Transformer)	-	04 Apr 2006
16-538TV-00C	1	Description KF**-D**-Ex1.*.***	C	08 Jul 2009
16-538TV-01C	7	Schematic (Amplifier)	C	30 Jul 2009
16-538TV-03C	4	Set up (Amplifier)	C	30 Jul 2009
16-538TV-05C	4	Layout (Amplifier)	C	30 Jul 2009
16-538TV-11C	2	Transformer	C	30 Jul 2009
16-538TV-13C	2	Test Reports	C	30 Jul 2009
PRDE-8886A	7	Test Report (Transformer)	-	02 Jul 2009
16-0538TV-00D	2	Description KF**-DU/DWB-Ex1.D	D	13 Oct 2014
16-0538TV-11D	2	Transformer KF**-DU/DWB-Ex1.D	D	21 Jan 2014
16-0538TV-47D	3	Checklist – General explosive gas atmospheres KF**-D**-Ex1.D	D	11 Jul 2012
16-0538TV-47E	5	Checklist for explosive atmospheres – KF**-DU/DWB-Ex1.D	E	18 Aug 2014
KFD2-VR4-Ex1.26				
266-010BS-00A	8	Description	A	02 Jun 2009
266-010BS-01A	1	Schematic	A	08 Jul 2009
266-010BS-02A	1	Components	A	10 Jul 2009
266-010BS-03A	1	Component overlay	A	08 Jul 2009
266-010BS-04E	15	Mechanical Parts	E	27 Mar 2014
266-010BS-05A	5	Printed Circuit board details	A	08 Jul 2009
266-010BS-06B	4	Transformers T1 & T2	B	09 Aug 2010
266-010BS-07B	2	Printed Circuit Board Lacquering details	B	09 Aug 2010
KFD2-VR2-Ex1.50M/500M				
266-012BS-01A	2	Schematic	A	02 Dec 2008
266-012BS-02A	1	Safety relevant components	A	04 Mar 2009
266-012BS-03A	1	Component overlay	A	02 Dec 2008
266-010BS-04E	15	Mechanical Parts	E	27 Mar 2014
266-012BS-05A	6	Main Printed Circuit Board	A	02 Dec 2008

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
266-012BS-06	3	Transformer details	Original	03 Oct 2005
KFD0-SD2-Ex Series				
266-018BS-00	14	Description	Original	06 Jan 2006
266-018BS-01	7	Schematic	Original	23 Nov 2005
266-018BS-02	5	Safety relevant components	Original	16 Dec 2005
266-018BS-03A	3	Component overlay	A	18 Nov 2008
266-018BS-05A	14	Printed Circuit Board	A	19 Nov 2008
16-0706IE-04C	14	Mechanical Parts	C	27 Mar 2014
266-018BS-06A	12	Transformer details	A	22 Feb 2012
KFD2-PT2-Ex1*(Y*)				
16-0706IE-01	1	Schematic	Original	21 Jul 2009
16-0706IE-03	1	Component overlay	Original	21 Jul 2009
16-0706IE-02	2	Safety relevant components	Original	21 Jul 2009
16-0906UL-05	6	PCB Layout	Original	18 Oct 2011
16-0706IE-04C	14	Mechanical Parts	C	27 Mar 2014
16-0706IE-06	4	Transformer details	Original	31 Jul 2009
16-0706IE-07	2	PCB lacquering details	Original	22 Jul 2009
KFD2-SR2-Ex*.W.*				
16-493PT-00B	4	Description	B	09 Jun 2004
16-493PT-00C	1	Description	C	05 Apr 2011
16-493PT-00D	3	Description	D	05 Mar 2014
16-493PT-01D	2	Schematic (Version 2)	D	05 Mar 2014
16-493PT-02B	1	Relevant Components	B	09 Jun 2004
16-0493UL-02	1	Relevant Components	-	13 Dec 2017
16-493PT-03B	Sheet 2 of 2	Component Set Up (Version 2 side B)	B	02 Jun 2004
16-493PT-04C	8	Mechanical Parts	C	05 Apr 2011
16-493PT-04D	1	Mechanical Parts (relay HF118F)	D	05 Mar 2014
16-493PT-05B	4	Layout (Version 2)	B	02 Jun 2004
16-315PT-06A	1	PTB-ATEX Umschreibung (Transformer T1)	A	12 May 2000
16-315PT-07	5	PTB-Ergänzung	-	23 May 2001
16-493PT-07D	2	Lacquering	D	05 Mar 2014

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3006X**

Current Issue: 0

Date of Issue: 21 February 2018

Document Number	Pages / Sheets	Document Title	Revision	Date
KFD0-RO-EX2*				
16-0622BV-00B	1	IECEX Description	B	12 Nov 2009
16-0622BV-00C	1	Description	C	30 Mar 2017
16-346BV-02	1	Schematic	-	15 Nov 1999
16-346BV-03	1	Component Set Up	-	15 Nov 1999
16-346BV-04	2	Layout	-	15 Nov 1999
16-346BV-05	1	Structure	-	15 Nov 1999
16-0622BV-04B	8	Mechanical Parts	B	12 Nov 2009
KFD2-SL2-Ex1.LK Series				
16-0562IE-00	21	Description	-	05 Feb 2014
16-0562ZE-01C	1	Schematics	C	16 Jul 2013
16-0562ZE-02C	6	Relevant Components	C	16 Jul 2013
16-0562ZE-03C	3	Component set-up	C	16 Jul 2013
16-0562ZE-05C	4	Layout	C	16 Jul 2013
16-345-11	8	Housing KF -15pol. symm.	-	12 Aug 1999
16-548ZE-06	2	Transformer	-	15 Dec 2006
16-562ZE-07B	1	Lacquering top + bottom - side	B	11 Jun 2008